ABSTRACT OF THE DISCLOSURE

A system and method for providing message-based leasing of resources in a distributed computing environment. Services may issue leases to clients and provide operations on those leases. The lease functionality of a service may be defined in an XML message schema. Gates may be used to perform lease operations. Leases may be granted for a period that may be negotiated. Leasing messages for performing leasing operations may be defined. The leasing messages may include messages to renew a lease and to cancel a lease. Services may specify an address where leasing messages may be sent. A lease renewal mechanism may be provided in which a gate may receive lease renewal messages and automatically respond to them. A mechanism to detect stale advertisements in a space may be provided. When a service publishes its advertisement in a space, the service obtains a lease on the publishing of its advertisement. Each advertisement may include a time by which the service may renew the advertisement. When the lease is not renewed, the space service marks the service advertisement as stale. Services renew advertisements by sending a renewal message to the space. Stale service advertisements may be deleted after a period. A space service may allow clients to lease service advertisements in the space to thus grant clients access to the services. Messages are described for accessing the leasing services provided by the space services.